

Serial No. 10/511,630 8  
Docket No. NE297- PCT (US)  
(TAK.049)

### REMARKS

Claims 1, 5, 6, 8-12, 15, 16, 18, and 21-24 are all of the claims presently pending in the application. Applicants have canceled claim 25 and 26 without prejudice or disclaimer. Applicants have amended claims 1 and 12 to define the claimed invention more particularly.

Applicants believe that entry of the claim amendments is proper since the claim amendments do not raise new issues, which would require further consideration and/or search. Indeed, Applicants have merely incorporated the previously considered subject matter of dependent claim 26 into independent claims 1 and 12.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1, 5, 6, 8-12, 15, 16, 18, and 21-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchida (U.S. Patent No. 6,897,430). Claims 10, 11, 15, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchida in view of in view of Verdiell.

Applicants respectfully traverse these rejections in the following discussion.

#### **I. THE CLAIMED INVENTION**

The claimed invention of exemplary claim 1, provides an optoelectronic hybrid integrated module wherein light emitted from the optical device, the optical device being flip-chip mounted on a first surface of the transparent base material, passes through the transparent

Serial No. 10/511,630 9  
Docket No. NE297- PCT (US)  
(TAK.049)

base material approximately perpendicular to the surface of the transparent base material and is emitted from the transparent base material approximately perpendicular to a second surface of the transparent base material, the second surface comprising a surface opposite the first surface (e.g., see Application at Figure 1, page 4, line 25 through page 5, line 11, and page 10, lines 12-25). This allows the number of components and processes of the module to be reduced so that mounting costs can be suppressed (e.g., see Application at page 5, lines 20-23).

## II. THE PRIOR ART REFERENCES

### A. The Uchida Reference

The Examiner alleges that the claimed invention of claims 1, 5, 6, 8-12, 15, 16, 18, and 21-26 would have been obvious in view of Uchida. Applicants submit, however, that, Uchida does not teach or suggest each and every feature of the claimed invention.

Applicants maintain the position set forth in the Amendment filed under 37 C.F.R. § 1.111 on January 6, 2009.

That is, Uchida does not teach or suggest, *"wherein light emitted from said optical device, said optical device being flip-chip mounted on a first surface of said transparent base material, passes through said transparent base material approximately perpendicular to the surface of said transparent base material and is emitted from said transparent base material approximately perpendicular to a second surface of said transparent base material, the second surface comprising a surface opposite the first surface"*, as recited in exemplary claim 1 and somewhat similarly recited in exemplary claims 12 and 23.

Indeed, in Uchida, light horizontally propagating through the core layer 1206 is

Serial No. 10/511,630 10  
Docket No. NE297- PCT (US)  
(TAK.049)

received by a first optical device 1201 (which is not flip chip mounted on a surface of a transparent base material). The first optical device 1201 converts the light into an electric signal and passes the electric signal to an electronic device 1103. The second optical device 1208 receives the electric signal and emits light into the core 1206. The light propagates through the core 1206 horizontally. The light is not emitted from the alleged transparent base material approximately perpendicular to a surface of the alleged transparent base material.

Furthermore, Applicants submit that the alleged optical device 1201, 1208 of Uchida, is clearly not flip-chip mounted on a surface of the transparent substrate 1205, 1206, 1207 (see Uchida at Figure 4). Indeed, the alleged optical device is "embedded in the core layer 1206" (see Uchida at column 7, lines 35-37).

The Examiner alleges, "Uchida also anticipates the limitation wherein the optical device is flip-chip bonded with the metal solder bumps (2302) in Fig. 13." (See Office Action dated May 28, 2009 at page 7). The Examiner, however, is clearly incorrect.

That is, with respect to Figure 13, Uchida merely discloses, "FIG. 13 shows an example where a print wiring 1104 and an electrode 1504 are connected via a bump 2302." (See Uchida at column 12, lines 31-32).

Thus, Figure 13 of Uchida does not teach or suggest that the optical device is mounted by the bump 2302, let alone teach or suggest that the optical device is flip-chip mounted by the bump 2302.

Furthermore, Applicants note that the Examiner is combining features from different embodiments of Uchida (e.g., Figure 4 and Figure 13). Applicants submit, however, that two embodiments in a single reference may not be combined, to anticipate a claimed invention, absent specific teaching. See *In re Kramer*, 18 USPQ2d 1415, 1416 (Fed. Cir.

Serial No. 10/511,630 11  
Docket No. NE297- PCT (US)  
(TAK.049)

1991); *Ex parte Beuther*, 71 USPQ2d 1313, 1316 (BPAI 2003). Thus, Applicants submit that the Examiner is inappropriately combining features from different embodiments of Uchida.

Therefore, Applicants submit that Uchida does not teach or suggest each and every feature of the claimed invention. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

#### **B. The Verdiell Reference**

The Examiner alleges that one of ordinary skill in the art would have combined Verdiell with Uchida to teach the claimed invention of claims 10, 11, 15, and 16. Applicants respectfully submit, however, that, even if combined, the alleged combination of references would not teach or suggest every feature of the claimed invention.

That is, claims 10, 11, 15, and 16 are allowable at least based on similar reasons to those set forth above, in section A, with respect to claims 1, 5, 6, 8-12, 15, 16, 18, and 21-26.

Therefore, Applicants respectfully submit that, even if combined, the alleged combination of references would not teach or suggest every feature of the claimed invention. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

### **III. FORMAL MATTERS AND CONCLUSION**

In view of the foregoing, Applicants submit that claims 1, 5, 6, 8-12, 15, 16, 18, and 21-24, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. Applicants respectfully request the Examiner to pass the above application to issue at the earliest possible time.


Serial No. 10/511,630 12  
Docket No. NE297- PCT (US)  
(TAK.049)

Should the Examiner find the application to be other than in condition for allowance, Applicant s requests the Examiner to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The undersigned authorizes the Commissioner to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Date: August 27, 2009

Respectfully Submitted,

  
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**FACSIMILE TRANSMISSION**

I hereby certify that I am filing this paper via facsimile, to Group Art Unit 2883, at (571) 273-8300, on August 27, 2009.

Date: August 27, 2009

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